

REMARKS

In an Official Action dated December 29, 2006, the Examiner rejected the claims under §112, §103, and under obvious-type double patenting. As discussed further below, Applicant requests that the Examiner reconsider the rejection of the claims.

§112

The Examiner contends that the claims are unclear because the claims recite that the biasing element is operable in first and second orientations and in the first orientation the biasing element is displaceable in a first direction to bias the arm in a preferred direction, whereas in the second orientation the preferred direction is reversed. Claim 1 also recites an indicator operable to indicate the preferred direction when the biasing element is in a relaxed state. The Examiner states that it is unclear how the arm can be biased in a preferred direction and be in a relaxed state.

However, claim 1 was clear both before the present amendment and is also clear after the present amendment. As previously mentioned, although the biasing element may be rotated in either direction to provide a biasing force, it is desirable to rotate the device in a preferred direction. Accordingly, the indicator provides an indication of the appropriate direction for displacing the biasing element depending on whether the biasing element is in a first orientation or a second orientation. For instance, if the biasing element is in a first orientation it may be desirable to rotate the biasing element in a clockwise direction to provide a biasing force.

Referring to Fig. 16, the indicator 280 identifies the direction that the device should be rotated to provide a biasing force. The indicator is able to identify the appropriate direction when the biasing element is in a relaxed state.

In light of the foregoing, Applicants believe that claim 1, along with claims 17 and 34 are clear. Accordingly, Applicants request that the Examiner reconsider the §112 rejection of claims 1-38.

§103

The Examiner rejected claims 1-38 as obvious in light of Japanese Patent No. JP403163245 in light of U.S. Patent No. 4,957,471. However, the combination of references do not teach or suggest the features of the pending claims, as discussed further below.

With respect to claim 1, the proposed combination of references does not teach many of the features of claim 1. For instance, claim 1 recites a housing, a shaft within the housing and an arm having a connector for connecting the arm to the housing. Additionally, claim 1 recites a biasing element within the housing. In contrast, the device in JP '245 does not include an arm having a connector for connecting the arm to the housing. The arm is rigidly attached to the housing. In fact, in Japan '245 the arm is formed as a unitary element with the housing, as Applicants' undersigned attorney can best understand the reference. The Examiner points to the connection between elements 20 and 20/17, but that connection is not a connection between the housing and the arm. Element 20 appears to be a retainer for retaining the housing on the fixed member 3, and the fixed member 3 does not house the biasing element. The spring is disposed within the outer housing, which appears to be integrally formed with the arm 5.

Additionally, as noted in the Official Action, the JP '245 reference does not teach or suggest an indicator for indicating the preferred direction for displacing the biasing element. St. John '471 does not fill this shortcoming in JP '245.

St. John '471 discloses a device having marking that relate to the amount of tension applied to the device. The Office Action states that the reference discloses an indicator 114 to indicate the amount of tension in the system and the amount of torque on the spring. Even assuming this to be true, it does not teach or suggest the features of claim 1.

If one uses the St. John '471 device there would be no way to know which direction the device should be rotated to properly apply tension. Therefore, an operator using the device could easily use the device in an improper manner, thereby potentially creating undesirable stress on the biasing element.

The indicator in claim 1 is operable to teach the preferred direction for displacing the biasing element to provide a biasing force. Applicants' indicator identifies the preferred direction regardless of whether the biasing element is in a biased or relaxed condition. St. John '247 does not indicate which direction is the preferred direction. St. John '247 simply provides an indication that may represent the magnitude of bias force applied by the tensioner.

Further, the Office Action does not even argue that the device in St. John '247 provides any indication when the biasing element is in a relaxed state, and the device in St. John '247 does not appear to provide any indication or reading when the biasing element is in the relaxed direction. In contrast, claim 1 recites that the indicator "indicate[s] which direction is the preferred direction when the biasing element is in a relaxed state."

Accordingly, since none of the cited references teach or suggest the features of claim 1, Applicants request that the Examiner reconsider the rejection of claim 1.

Regarding dependent claim 5, Applicants' device is designed so that the biasing element can be flipped to reverse the bias of the biasing element. For instance, in a first orientation, the spring is a flat torsional spring designed to be rotated in a clockwise direction to provide a biasing force. Although the device may be rotated in a counter-clockwise direction to provide a biasing force, doing so may lead to premature wear. If a counter-clockwise biasing force is desired, the biasing element may be flipped over inside the housing.

As recited in claim 5, the tensioner includes an indicator operable to indicate the proper direction to ensure that the user rotates the device in the proper direction based on the orientation of the spring. Nothing in the cited art teaches or suggests an indicator that is connectable to the housing to indicate that the preferred direction for rotating the biasing element is a clockwise direction when the biasing element is in a first orientation. Similarly, nothing in the cited art teaches or suggests that the indicator is operable to indicate that the preferred direction for rotating the biasing element is a counterclockwise direction when the biasing element is in a second orientation. Accordingly, claim 5 is patentably distinct from the cited art.

Regarding claim 6, as discussed in the application, the indicator may cooperate with a portion of the biasing element to ensure that the biasing element is connected to the tensioner in the proper orientation. Claim 6 recites that the indicator is:

cooperable with a portion of the biasing element such that the biasing element impedes connection of the indicator to the housing in the first orientation when the biasing element is in the second orientation.

Similarly, claim 7 recites that the indicator is:

cooperable with a portion of the biasing element such that the

biasing element impedes connection of the indicator to the housing in the second orientation when the biasing element is in the first orientation.

The official action does not even mention such features. Accordingly, Applicants request that the Examiner reconsider the rejection of claim 6 and 7.

The office action fails to mention any aspect of the prior art that teaches or suggests the features in claims 8 and 9. As discussed in the application, the indicator 280 may have a lower portion in the shape of a key that is insertable into a portion of the housing, such as a pocket 290, to connect the indicator to the device. Additionally, the indicator may include an element for locking the indicator in place, such as locking detent 288.

Claim 8 recites that the indicator comprises a connector for connecting the indicator to the housing, and claim 9 recites that the indicator comprises a lock for locking the indicator to the housing. Since the office action fails to mention these features or any aspect of the prior art that teaches or suggests such features, Applicants request that the Examiner reconsider the rejection of claims 8 and 9.

Referring now to claim 17, claim 17 recites a biasing element that is displaceable in a preferred direction to provide a biasing force. In a first orientation, the preferred direction is a first direction, and in a second orientation, the preferred direction is a second direction that is different from the first direction. Claim 17 also recites an indicator for indicating the preferred direction for the biasing element. As discussed previously in connection with claim 1, the cited art does not teach or suggest such features. Instead, the cited art simply teaches a tensioner having marking that are related to the magnitude of biasing force provided by the tensioner. However, this is

quite different from the device recited in claim 17. Accordingly, Applicant's request that the Examiner reconsider the rejection of claim 17.

Similar to previously discussed, many of the features in dependent claims 18-23 and 25-33 are not discussed in the official action and the features do not appear to be taught or suggested by the cited art. Accordingly, Applicants request that the Examiner reconsider the rejection of dependent claims 18-23 and 25-33.

Referring to claim 34, as previously discussed, the tensioner has a biasing element that has two different relaxed state orientations. In one, the biasing element is designed to provide a biasing force in a first direction, in the second orientation, the biasing element is designed to provide a biasing force in a second direction. Claim 34 also recites the step of operating an indicator to determine whether the biasing element is disposed in the first orientation or the second orientation. Nothing in the cited references teaches or suggests such features. In fact, the official action on cites St. John as teaching an indicator that indicates the amount of tension in the biasing element. Such teaching does not teach whether the biasing element is in a first or second orientation—particularly since claim 34 recites that the first and second orientations differ in the relaxed state. Accordingly, Applicants request that the Examiner reconsider the rejection of claim 34.

Similarly, Applicants request that the Examiner reconsider the rejection of dependent claims 35-40. Many of the features of these dependent claims are not even mentioned in the official action. For instance, claim 39 recites that the step of operating an indicator comprises:

operating an indicator to identify which of the first and second orientations the biasing element is in when the biasing element is in a relaxed state.

As discussed previously, the official action does not address this feature, and the cited art does not teach or suggest such features. Accordingly, Applicants request that the Examiner reconsider the rejection of dependent claims 35-40.

Applicants also request that the Examiner favorably consider newly presented claims 41-47. None of the references of record teach or suggest the combination of features in claim 41 or dependent claims 42-47.


Double-Patenting

As discussed above in connection with the §103 rejection, the claims recite numerous features that are not taught or suggested by the prior art. One such feature is the indicator. The discussion above details the differences between the indicator recited in the pending claims and the feature in St. John '471 cited by the Examiner. Since St. John'471 does not teach or suggest the features of the indicator as discussed above, the double-patenting rejection is inappropriate. Therefore, Applicants request that the Examiner reconsider the double-patenting rejection of claims 1-38.

In light of the foregoing, Applicant believes that this application is in form for allowance. The Examiner is encouraged to contact Applicant's undersigned attorney if the Examiner believes that issues remain regarding the allowability of this application.

Respectfully submitted,

DANN, DORFMAN, HERRELL & SKILLMAN
A Professional Corporation
Attorneys for Applicant(s)

By 
Stephen H. Eland
PTO Registration No. 41,010

Telephone: (215) 563-4100
Facsimile: (215) 563-4044